

# 1996 Wood Processor Report

*including Import/Export Information*

*Data Collected Under the Provisions of*

*Title 12 MRSA §8884*

February 1998



Maine Forest Service  
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## What is in this report?

This report shows the volume of wood that was processed by Maine mills, imported from out of state, and exported from Maine without processing during 1996.

- Tables display wood flow details for: Sawlogs, Pulpwood, Biomass Chips and Imports and Exports.
- Sawlogs and Pulpwood figures appear in a species-by-county matrix.
- Biomass figures appear by county.
- Import and export figures are tallied by species only.

## How was this information collected?

The Maine Forest Service (MFS) collects information on woodflow through the Annual Wood Processor Report. The information contained in this report is based on the 1996 wood processor reporting forms.

For 1996, reports were received from 276 primary processing mills, 227 loggers and brokers who may have exported, and from 58 mills that burn some form of wood for energy. These businesses report wood volumes processed by species and county of origin.

## What is the purpose of the Wood Processor Report

Each year, the Maine Forest Service collects information from Maine primary wood processors regarding the volumes of wood processed in Maine. Information is also collected for volumes imported or exported to or from Maine. Volume information contained in these reports is confidential and by law shall not be made public except that summary reports may be published using aggregated data which does not reveal the activities of an individual person or firm (under the provisions of 12MRSA § 8884, "Forest Landowner and Wood Processor Reporting Requirements"). Information in this database is tabulated and used for additional purposes as well.

## Notes on reading this report.

This wood processor report is arranged so that you can look up volumes by county, imports, exports, and state totals. Maine's sixteen counties are listed here.

Androscoggin	Hancock	Oxford	Somerset
Aroostook	Kennebec	Penobscot	Waldo
Cumberland	Knox	Piscataquis	Washington
Franklin	Lincoln	Sagadahoc	York

The information provided for each county is organized into three (3) major product sections.

Product	*Unit of Measure
Sawlogs	MBF
Pulpwood	cords
Biomass Chips	green tons

\*Note: Volumes also appear as cords (on the summary page) for the purpose of having a common measurement unit for comparison and for calculating grand totals across product types.

Wood flow is tallied by: Sawlogs, Pulpwood and Biomass Chips.

## Sawlog Species in this report

Soft wood	Spruce & Fir	White & Red Pine	Hemlock	Cedar	Other Softwood				
Hard wood	Beech	White Birch	Yellow Birch	Sugar Maple	Red(soft) Maple	Oak (all)	Ash (all)	Aspen	Other Hardwood

## Pulpwood Species in this report

Softwood	Spruce & Fir	White & Red Pine	Hemlock	Cedar	Other Softwood
Hardwood	Aspen	Other Hardwood			

## Biomass Chips in this report

All Species
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## Definitions and Notes

1. **Biomass Chips** are produced in the woods using the entire tree, stem or bole, branches and top. These chips usually go to wood to energy facilities; however they are suitable for sludge composting, play ground padding, and mulch.
2. **Bole/Stem Chips** are usually produced in the woods using portable chippers and are made from the lower portion of the tree minus limbs and top. These chips may not be bark free but are suitable for use in pulp mills. There are some stationary tree-length chipping operations.
3. **Cords** (cds) (MFS Rules Chapter 20 Definition). A "cord" is a unit of measure of wood products 4 feet wide, 4 feet high, and 8 feet long, or its equivalent, containing 128 cubic feet when the wood is stacked and well stowed. Any voids that will accommodate a stick, log or bolt of average dimensions to those in the pile shall be deducted from the measured volume.
4. **Hog fuel** is any woody residue from the woods or mills (such as sawdust, bark, and shavings) and can be biomass chips measured in either green or dry (bone dry) tons.
5. **Mill residues** are clean, pulp quality chips, made from slabs and edgings at sawmills, etc. Measured in green tons, mill residues come from the sawlog component of the volumes reported and therefore are not drain figures. They do make up a part of the volumes of fiber used to make pulp and should be added to the volume of pulpwood to get the total amount of wood used to make paper.
6. **Pulpwood** includes: tree length; long length; 4', 8', 16'; bole or stem chips converted to cords for comparison with previous figures.
7. **Sawlogs** includes sawlogs, studwood, palletwood, boltwood and veneer.
8. **Thousand board feet (MBF)** One thousand board feet. One board foot is a piece of wood 1" thick by 12" long by 12" wide.

## Interpreting Harvest, Export, Import, and Processed by the Maine Forest Products Industry

- **Maine wood processed** is wood that was harvested in Maine and utilized by a Maine primary processing facility.
- **Exported from Maine without processing** is wood that was harvested in Maine and exported out of the state without primary processing by a Maine mill.
- **Imported from out-of-state** is wood that is imported from out of state (not harvested in Maine) and primary-processed by a Maine mill.
- **Total processed by Maine Forest Products Industry** is the amount of wood that was primary-processed in Maine regardless of origin.
- Pulpwood figures include pulp-quality bole or stem chips that are produced by many of Maine's whole tree chipper operators. These chippers also produce biomass which is burned for energy by many mills and wood-fired electrical generating facilities.
- Conversions: 1 MBF = 2 cords                      1 cord = 2.5 green tons

## Sawlogs<sup>1</sup> Wood flow in Maine as Reported to the Maine Forest Service (converted to MBF)

	Softwood						Hardwood										All Species
County	Spruce & Fir	White & Red Pine	Hemlock	Cedar	Other Softwood <sup>2</sup>	Total Softwood	Beech	White Birch	Yellow Birch	Sugar Maple	Red Maple	Oak	Ash	Aspen	Other Hardwood	Total Hardwood	Grand Total
Androscoggin	41	6,531	1,053	40	1	7,666	192	405	75	81	62	655	98	342	220	2,130	9,796
Aroostook	112,407	2,294	8,055	20,810	176	143,742	530	2,504	1,491	3,115	1,630	156	1,450	68,266	5,122	84,264	228,006
Cumberland	152	19,951	3,000	10	2	23,115	447	336	96	1,079	417	849	162	512	237	4,135	27,250
Franklin	12,830	21,728	611	84	0	35,253	1,335	8,400	3,595	3,718	1,846	993	1,087	497	179	21,653	56,906
Hancock	6,597	5,647	7,694	604	3	20,545	88	546	105	178	127	114	275	6,050	5,763	13,246	33,791
Kennebec	1,121	16,203	1,973	22	2	19,321	144	1,119	97	269	304	714	166	378	113	3,304	22,625
Knox	540	3,035	118	2	0	3,695	43	435	29	48	55	138	17	9	2	776	4,471
Lincoln	461	6,321	355	5	0	7,142	20	159	35	2	20	41	43	68	0	388	7,530
Oxford	16,019	42,321	3,354	1	0	61,695	2,122	5,385	2,054	2,077	1,627	3,034	1,120	312	2,161	19,892	81,587
Penobscot	52,570	19,933	28,323	4,735	60	105,621	2,057	3,788	1,204	2,353	2,953	213	1,597	31,072	3,932	49,169	154,790
Piscataquis	62,371	7,539	6,034	868	11	76,823	1,119	3,774	1,818	4,208	2,892	56	1,333	11,924	1,507	28,631	105,454
Sagadahoc	14	1,728	174	0	0	1,916	4	42	0	0	0	138	1	328	0	513	2,429
Somerset	34,841	12,105	897	1,195	255	49,293	1,722	6,620	1,751	4,637	1,676	342	538	1,900	114	19,300	68,593
Waldo	1,373	9,153	600	333	0	11,459	41	1,757	71	141	170	380	360	372	48	3,340	14,799
Washington	31,437	6,586	11,574	609	35	50,241	27	813	335	206	595	16	230	6,401	11,013	19,636	69,877
York	28	19,690	1,182	0	0	20,900	58	83	16	47	56	323	20	8	13	624	21,524
<b>Maine wood processed</b>	<b>332,802</b>	<b>200,765</b>	<b>74,997</b>	<b>29,318</b>	<b>545</b>	<b>638,427</b>	<b>9,949</b>	<b>36,169</b>	<b>12,772</b>	<b>22,159</b>	<b>14,430</b>	<b>8,162</b>	<b>8,497</b>	<b>128,439</b>	<b>30,424</b>	<b>271,001</b>	<b>909,428</b>
+ Exported from Maine without processing	421,437	27,311	4,409	16,613	16	469,786	1,342	4,274	6,121	18,447	4,329	6,524	3,143	7,401	19,227	70,808	540,594
<b>= Total harvested from Maine forests</b>	<b>754,239</b>	<b>228,076</b>	<b>79,406</b>	<b>45,931</b>	<b>561</b>	<b>1,108,213</b>	<b>11,291</b>	<b>40,443</b>	<b>18,893</b>	<b>40,606</b>	<b>18,759</b>	<b>14,686</b>	<b>11,640</b>	<b>135,840</b>	<b>49,651</b>	<b>341,809</b>	<b>1,450,022</b>
Imported from out of state	73,493	17,844	1,896	3,951	55	97,239	1,349	8,807	4,519	2,808	1,781	955	649	64,978	2,997	88,843	186,082
<b>Total processed by Maine forest products industry</b>	<b>406,295</b>	<b>218,609</b>	<b>76,893</b>	<b>33,269</b>	<b>600</b>	<b>735,666</b>	<b>11,298</b>	<b>44,976</b>	<b>17,291</b>	<b>24,967</b>	<b>16,211</b>	<b>9,117</b>	<b>9,146</b>	<b>193,417</b>	<b>33,421</b>	<b>359,844</b>	<b>1,095,510</b>

Notes: 1. **Sawlogs** includes logs, veneer, boltwood, studwood, pallet-wood, etc. Cords converted to MBF @ 2 cords = 1 MBF.

2. **Other Softwood** includes larch, pitch pine, and a few others.

## Pulpwood Woodflow in Maine as reported to the Maine Forest Service (converted to cords)

County	Softwood						Hardwood			All Species
	Spruce	White & Red Pine	Hemlock	Cedar	Other Softwood <sup>1</sup>	Total Softwood	Aspen <sup>2</sup>	Other <sup>3</sup> Hardwood	Total Hardwood	Grand Total
Androscoggin	2,168	16,909	5,023	0	0	24,100	1,582	15,150	16,732	40,832
Aroostook	95,732	1,258	61,601	0	85	158,676	2,752	287,371	290,123	448,799
Cumberland	1,809	29,711	9,260	0	0	40,780	686	35,194	35,880	76,660
Franklin	52,552	9,078	16,246	0	10	77,886	18,697	139,173	157,870	235,756
Hancock	16,572	7,458	14,741	0	343	39,114	1,992	77,386	79,378	118,492
Kennebec	5,642	22,008	44,418	0	0	72,068	4,103	26,497	30,600	102,668
Knox	7,008	6,307	3,286	0	0	16,601	3,817	8,524	12,341	28,942
Lincoln	4,071	9,864	4,124	0	0	18,059	1,181	6,577	7,758	25,817
Oxford	46,845	38,383	36,590	0	11	121,829	15,398	145,798	161,196	283,025
Penobscot	111,013	21,374	101,036	0	102	233,525	11,374	296,043	307,417	540,942
Piscataquis	98,936	8,278	25,801	0	0	133,015	8,469	313,084	321,553	454,568
Sagadahoc	663	4,328	885	0	0	5,876	779	991	1,770	7,646
Somerset	100,678	9,995	35,014	0	0	145,687	18,620	254,830	273,450	419,137
Waldo	13,333	9,917	8,115	0	0	31,365	4,152	29,555	33,707	65,072
Washington	16,934	7,953	5,067	0	966	30,920	454	92,836	93,290	124,210
York	450	36,545	11,020	0	0	48,015	355	42,078	42,433	90,448
Maine wood processed	574,406	239,366	382,227	0	1,517	1,197,516	94,411	1,771,087	1,865,498	3,063,014
+ Exported from Maine without processing	125,804	3,924	3,101	0	103	132,932	4,694	58,735	63,429	196,361
= Total harvested from Maine Forests	700,210	243,290	385,328	0	1,620	1,330,448	99,105	1,829,822	1,928,927	3,259,375
+ Imported from out of state	218,845	55,953	116,417	0	923	392,138	95,686	503,200	598,886	991,024
Total processed by Maine Forest Products Industry	793,251	295,319	498,644	0	2,440	1,589,654	190,097	2,274,287	2,464,384	4,054,038

### Notes

1. Other softwood is comprised of bole chips for which specific species information was not collected.
2. Aspen volumes are based on pure loads.
3. "Other hardwood" is comprised of all hardwood species except aspen sold in pure loads.

Mill Residues: 1,403,283 tons of mill residues were obtained from Maine sawmills for manufacture into pulp. These figures are not included in the pulpwood volumes reported on this page. This does not represent a drain on the forest resource, but is a further utilization of wood included in the sawlog tally.

## Biomass Chips

*Woodflow in Maine as reported to  
the Maine Forest Service (in green tons)*

	All species
Androscoggin	14,021
Aroostook	250,689
Cumberland	63,997
Franklin	205,094
Hancock	28,165
Kennebec	16,186
Knox	5,012
Lincoln	9,554
Oxford	52,160
Penobscot	58,835
Piscataquis	88,955
Sagadahoc	5,247
Somerset	311,509
Waldo	19,434
Washington	27,719
York	92,735
Maine wood processed	<b>1,249,312</b>
+ Exported from Maine without processing	48,954
= Total harvested from Maine forests	<b>1,298,266</b>
+ Imported from out of state	524,674
Total processed by Maine Forest Products Industry	<b>1,773,986</b>

### Note

**Biomass Chips** are produced in the woods using the entire tree, stem or bole, branches and top. These chips usually go to wood to energy facilities. They are also used for sludge composting, play ground padding and mulch.

**1996**

## Wood Import and Exports

*Origins and Destinations*

*To and From the State of Maine*

Import Origins	Export Destinations
<ul style="list-style-type: none"> <li>• Connecticut</li> <li>• Massachusetts</li> <li>• New Hampshire</li> <li>• New York</li> <li>• Rhode Island</li> <li>• Vermont</li> </ul>	<ul style="list-style-type: none"> <li>• Massachusetts</li> <li>• Michigan</li> <li>• New Hampshire</li> <li>• New York</li> <li>• Vermont</li> <li>• Wisconsin</li> </ul>
<ul style="list-style-type: none"> <li>• Canada <ul style="list-style-type: none"> <li>New Brunswick</li> <li>Nova Scotia</li> <li>Prince Edward Island</li> <li>Quebec</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Canada <ul style="list-style-type: none"> <li>New Brunswick</li> <li>Nova Scotia</li> <li>Ontario</li> <li>Quebec</li> </ul> </li> </ul>

Please send your comments or corrections to the  
Maine Forest Service, 22 SHS, Augusta, Maine 04333

1996 Wood Processor Report: Maine Forest Service, February 1998

## Summary: Woodflow in Maine as Reported to the Maine Forest Service for 1996

Product		Harvest Export, Import & Processed by Maine Forest Products Industries	Total Volume in 1996	Volumes converted to cords
<b>Sawlogs</b> (in MBF) 1 MBF = 1000 board feet	a	Maine wood processed	909,428	1,818,856
	b	Exported from Maine without processing	540,594	1,081,188
	c	Total harvested from Maine forests ( a + b = c )	1,450,022	2,900,044
	d	Imported from out of state	186,082	372,164
	e	Total processed by Maine Forest Products Industry ( a + d = e )	1,095,510	2,191,020
<b>Pulpwood</b> (in cords)	a	Maine wood processed	3,063,014	3,063,014
	b	Exported from Maine without processing	196,361	196,361
	c	Total harvested from Maine forests ( a + b = c )	3,259,375	3,259,375
	d	Imported from out of state	991,024	991,024
	e	Total processed by Maine Forest Products Industry ( a + d = e )	4,054,038	4,054,038
<b>Biomass Chips</b> (in green tons)	a	Maine wood processed	1,249,312	499,725
	b	Exported from Maine without processing	48,954	19,582
	c	Total harvested from Maine forests ( a + b = c )	1,298,266	519,306
	d	Imported from out of state	524,674	209,870
	e	Total processed by Maine Forest Products Industry ( a + d = e )	1,773,986	709,594
<b>Totals</b>	a	Maine wood processed		5,381,595
	b	Exported from Maine without processing		1,297,131
	c	Total harvested from Maine forests ( a + b = c )		6,678,725
	d	Imported from out of state		1,573,058
	e	Total processed by Maine Forest Products Industry ( a + d = e )		6,954,652

Note on conversions -- Sawlogs: 1 mbf = 2 cords      Whole Tree Chips & Biomass: 1 cord = 2.5 green tons